# Sample Paper 2014 <br> Class - XII <br> Subject - Informatics Practices (065) 

Instructions: (i) All questions are compulsory
(ii) Answer the questions after carefully reading the text.

## SECTION - A (10 Marks)

## QA Answer the following questions:

A. 1 Expand the following terms: (i) OSS (ii) ODF ..... 2
A. 2 What do you mean by Denial of Service attacks? ..... 2
A. 3 Ms Vidya Chouhan is confused between Proprietary Software and Open Source Software. Mention at least two points of difference to help her understand the same. ..... 2
A. 4 Identify the type of topology from the following: ..... 1
A.4.1 If each node is connected with the help of independent cable with the help of a central switching (communication controller)
A.4.2 If each node is connected with the help of a single co-axial cable.
A. 5 Name the protocols used for sending \& receiving mails. ..... 1
A. 6 Name two encodings used for Indian language computing. ..... 1
A. 7 Which of the following is not a feature of Networking? ..... 1
(i) Resource Sharing
(ii) Reliability
(iii) Uninterrupted Power Supply
(iv) Reduced Cost

## Section B (25 Marks)

## QB Answer the following questions:

B. 1 While working in Netbeans, Ms Kanta Surbhi wants to display "cleared" or "Re attempt required" message depending the marks entered in jTextField. Help her to choose more appropriate statement out of if statement and Switch statement.
B. 2 Write a statement to make jTextField as un-editable.
B. 3 Suppose you want to select your Nationality out of four option into a form name the control you will use 1 for it.
B. 4 What was the differences between Flow Layout and Border Layout?
B. 5 What will be the output of the following program code:
public class MyClass\{p
int a,b;
void set(int I,int J)
\{
$\mathrm{a}=\mathrm{I} ; \quad \mathrm{b}=\mathrm{J}$;
\}
void show()

```
{
System.out.println(a+" " +b+`\n');
}
public static void main(String k[])
{
MyClass o1=new MyClass();
MyClass o2=new MyClass();
o1.set(10,4);
o2=o1;
o1.show();
o2.show();
}
}
```

B. 6 State and define the different types of Inheritance with neat diagram?
B. 7 What is the difference between Method overloading and Method Overriding?
B. 8 What is the difference between Call by Value and Call by Reference?
B. 9 What is an use of Extends and Implements keyword in java?
B. 10 Difference between XML and HTML.
B. 11 What will be the value of P and Q after execution of the following code?
int $\mathrm{P}, \mathrm{Q}=100$;
for $(\mathrm{P}=10 ; \mathrm{P}<=12 ; \mathrm{P}++)$
\{
$\mathrm{Q}+=\mathrm{P} ;$
\}
System.out.println(P);
System.out.println(Q);
B. 12 Rewrite the following program code using a Switch statement:
if( code ==1)
Month = "January";
else if ( code $==2$ )
Month = "February";
else if ( code $==3$ )
Month = "March"
else if ( code $==4$ )
Month = "April";
else
Month = "No Match";
B. 13 What will be displayed in jTextField1 after executing the following code?
int $\mathrm{m}=16$;
$\mathrm{m}=\mathrm{m}+1$;
if $(\mathrm{m}<15)$
jTextField1.setText(Integer.toString(m));
else
jTextField1.setText(Integer.toString(m+15));
B. 14 An institute offers MCA course of duration 3 years. The interface given below is designed to capture the marks secured by student in the semester exams. Your help is sought to enhance the interface so that it is able to :


The specification of this application are as under :

| Object Type | Object Name | Description |
| :--- | :--- | :--- |
| Text Field | rollnoTF <br> sm1TF, sm2TF <br> sm3TF, sm4 TF <br> sm5TF, sm6TF <br> totTF <br> perTF | To get rollno <br> To get marks of year1's semesters <br> To get makes of year2's semesters <br> To get marks of year3's semesters <br> To show total marks <br> To show percentage marks |
| Labels | rnoWidLbl | Lable net to rollnoTF, showing maximum <br> allowed width of rollno |
| Button | repLbl <br> reportBTN <br> resetBTN | To calculate total and percentage <br> To display report <br> To reset the form |

a) When user clicks the button Total, the total marks and the percentage of marks secured by the student should be displayed in text totTF and perTF respectively. (Assume that the marks in each semester are out of 600)
b) When the user clicks on the button Report, the final report should be displayed in the repLbl in the following format:

$$
\begin{equation*}
\text { Total marks }=\ldots \text { and percentage }=\ldots \% \tag{2}
\end{equation*}
$$

c) Upon clicking the Reset Form button, the form should get cleared.

## SECTION - C (35 Marks)

QC Answer the following questions:
C. 1 Write MySql command that will be used to open an already existing database "CONTACTS".
C. 2 Table Employee has 4 records and Table Dept has 3 records in it. Mr. Jain wants to display all information stored in both of these related tables. He forgot to specify equi-join condition in the query. How many rows will get displayed on execution of this query?
C. 3 Rama is not able to change a value in a column to NULL. What constraint did she specify when she created the table.
C. 4 A table "Transport" is a database has degree 3 and cardinality 8 . What is the number of rows and columns in it.
C. 5 In a Database School there are two tables Employee and Dept as shown below:

Table : Employee

| EmpID | Name | Sal | Deptno |
| :---: | :--- | :---: | :---: |
| T001 | Vishakha | 34000 | 10 |
| T002 | Mridual | 32000 | 50 |
| T003 | Manish | 45000 | 20 |

Table : Dept

| Deptno | DName | LocationID |
| :---: | :--- | :---: |
| 10 | Lights | HH02 |
| 20 | Dance | FF02 |
| 30 | Production | AB01 |

C.3.1 Identify the foreign key in the table Employee.
C.3.2 What output, you will get, when an equui-join query is executed to get the NAME from Employee table and corresponding DNAME from Dept table ?
C. 6 The Doc_Name Column of a table Hospital is given below:

| Doc_Name |
| :---: |
| Avinash |
| Hariharan |
| Vinayak |
| Deepak |
| Sanjeev |

Based on the information, find the output of the following queries:
(i) SELECT Doc_Name FROM HOSPITAL WHERE Doc_Name like "\%v";
(ii) SELECT Doc_Name FROM HOSPITAL WHERE Doc_Name like " $\% \mathrm{e} \%$ ";
C. 7 What is the purpose of ALTER TABLE command in MySQL? How is it different from UPDATE command?
C. 8 Distinguish between a Primary Key and Candidate Key with the help of suitable examples of each. 2
C. 9 What is the purpose of DROP TABLE command? How is it different from DELETE command? 2
C. 10 Pooja, a student of class XI, created a table "BOOK". Price is a column of this table. To find the details of books whose prices have not been entered she wrote the following query:

## SELECT * FROM BOOK WHERE PRICE = NULL;

Help Pooja to run the query by removing the errors from the query and overwriting it.
C. 11 Write MySQL command for creating a table "BANK" whose structure is given below:

| Field Name | DataType | Size | Constraints |
| :--- | :--- | :--- | :--- |


| Acct_Name | Integer | 4 | Primary Key |
| :--- | :--- | :---: | :--- |
| Name | Varchar | 3 |  |
| BirthDate | Date |  |  |
| Balance | Integer | 8 | Not Null |

C. 12 Consider the table Doctor given below, write command in MySQL for (1) to (4) and output for (5) to (8). Table : DOCTOR

| ID | Name | Dept | Gender | Experience | ConstFee |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 201 | R.K. Nath | ENT | M | 12 | 300 |
| 457 | Mahavir Singh | SKIN | M |  | 500 |
| 365 | M. Asthana | MEDICINE | F | 9 | 250 |
| 221 | V. S. Nag | ENT | M | 3 | 150 |
| 122 | S. P. Sinha | NEPHRO | F |  | 200 |
| 110 | J. P. Pandey | CARDIOLOGY | M | 9 | 500 |

C.12.1 To display name of all doctors who are in Medicine having more than 10 years of experience. 1
C.12.2 To display the different departments. 1
C.12.3 To display minimum consultation fee of female doctors. 1
C.12.4 To display name and department of male doctors who has no experience. 1
C.12.5 SELECT AVG(ConstFee) FROM Doctor WHERE NOT Gender='F'; 11/2
C.12.6 SELECT Count(Experience) FROM Doctor; 11/2
C.12.7 SELECT Name, Experience FROM Doctor WHERE ID BETWEEN 100 AND 200; ½
C.12.8 SELECT SUM(ConstFee),MAX( Experience) FROM Doctor; 1⁄2
C. 13 Answer the following questions:
C.13.1 SELECT $1000+\operatorname{SQRT}(100)$;
C.13.2 SELECT SUBSTR ( 'RED SCHOOL JHAJJAR', 5, 3); 1
C.13.3 Difference between CHAR and VARCHAR data type. 1
C.13.4 Differentiate between COMMIT and ROLLBACK. 1
C.13.5 What is NULL value in MySQL database? Can you use nulls in arithmetic expression? 1
C.13.6 What is table alias? 1

QD Answer the following questions:
D. 1 Give one social impact of e-Business.
D. 2 Write three important features of e-Governance. Give URL of one of the commonly used e-Governance portals.
D. 3 Anuja is creating a form for her practical file. Help her to choose most appropriate controls from List Box, Combo Box, TextField, TextArea, Radio Button, Check Box, Label and Command Buttonfor the following entries from user.
(i) A message "Enter Marks" in front of a TextField.
(ii) An input to choose more than one subjects from a set of given choices.
(iii) An input for entering remarks.
(iv) An input for accepting Gender.

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